

pulmonary silicosis were examined, average age 66.98 years, time of exposure to dust was 26.50 years in average. The occurrence of co-morbidities was determined. In order to functionally assess the patients, we used the comprehensive ICF Core Set for chronic obstructive diseases.

Results.– The most frequent co-morbidity was back pain (88.8%), hearing disorder (82.7%), chronic obstructive pulmonary disease (59.6%), cardiovascular system diseases (arterial hypertension 65.4% and chronic ischemic heart disease 46.2%). We discovered a significant link between higher silicosis levels as displayed by X-ray and arterial hypertension, hearing disorders and hip arthritis. We also observed most significant relationship between the x-ray evaluation of silicosis and ICF domains: heart functions, respiratory muscle functions, social positions and services, transport system and politics.

Conclusion.– We presented the most frequent occurrence of co-morbidities with patients with chronic occupational pulmonary disease, the important links between X-ray forms of silicosis, co morbidities and ICF classification domains which enables the more comprehensive assessment of these patients.

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P305-e

The changes of illness perception, negative emotions and arterial blood pressure applying the method of expressive writing in the patients of ischemic heart disease

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Keywords: Expressive writing; Illness perception; Negative emotions; Ischemic heart disease

Background.– The expressive writing about stressful events has been found to result in improvements in both physical and psychological health. The aim of the study was to determine the changes of illness perception, negative emotions and arterial blood pressure in the patients of ischemic heart disease applying the method of expressive writing.

Methods.– Hundred and twenty-six cardiac patients from two rehabilitation hospitals completed the course of four sessions. Brief illness perception questionnaire PANAS-X were used to assess patients.

Results.– The patients of the expressive writing group believed that their illness had less serious consequences ($P=0.027$) and greater personal control ($P=0.030$); they also experienced fewer emotions towards the illness ($P=0.006$) as well as perceived their illness significantly more clearly ($P=0.001$); they also felt fewer negative emotions ($P=0.011$); their systolic blood pressure (SBP) ($P=0.049$) was lower in comparison with the patients from the non-writing group.

Discussion.– After four sessions patients in the expressive writing group changed four out of eight items of illness perception, also reduced negative emotions and SBP than patients in the non-writing group.

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P306-e

Evaluation of the effects of physical activity in hemodialysis patients

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Background.– Chronically dialysed patients perform little physical activity, therefore, their physical efficiency is low.

Objective.– The aim of this study was to evaluate exercise efficiency, cardiologic and biochemical parameters before and after a four-week exercise programme.

Material and methods.– The study enrolled 16 hemodialysis patients (9 females and 7 males), aged 24-74; mean age 53 ± 15 ($x \pm SD$). The mean time on hemodialysis was 70 ± 67 ($x \pm SD$) months. The dialysed patients spent 4 weeks in the Rehabilitation Department. The following tests and examinations were performed before and after the exercise programme: anamnesis, physical examination, cardiopulmonary exercise testing (CPET) and a 6-minute walk (6MWT), biochemical tests.

Results.– The peak oxygen uptake (VO_{2peak}) for 1 kg body mass significantly increased from 16.6 ± 3.2 ($x \pm SD$) ml/kg/min to 18.6 ± 4.8 ml/kg/min. The distance (6MWT) increased by 73 meters, which consists 42% of the basal value and this change was significant. The exercise caused also hemodynamic changes as a decrease of minimum systolic blood pressure: 120 ± 23 vs 108 ± 15 mmHg. Average values of pulse rate: 61 ± 22 vs 53 ± 13 and heart rate were also decreased: 77 ± 10 vs 75 ± 8 .

Discussion.– Exercise programme resulted in an improvement of physical efficiency for those who managed to complete it. The exercise caused also hemodynamic changes. No significant changes in biochemical tests results have been found.

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P307-e

Physical rehabilitation at an arterial hypertension with simulator training

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Keywords: Hypertension; Simulator training

Objectives.– To investigate the effectiveness physical rehabilitation (PR) with simulator training (ST) in patients with arterial hypertension (AH).

Methods.– Hundred and eight patients with AH were included to programs of PR consisted from 10 sessions. Fifty-three patients were obtained the employments on cyclic and power simulators with telemetry monitoring of cardiorespiratory system; 51 patient were carried out by standard techniques of PR at AH - control group, CG). All the patients were treated by basic drug therapy.

Results.– Since 6-7-th session stabilization of BP at a target level in group ST, after 9-10-th session - in group GE was marked. All the patients marked improvement of the common condition of health, increase of daily activity and tolerance to physical loading; doses of supporting drug therapy have been decreased at 64% of patients of group ST and at 27% of patients of group GE.

Discussion.– Using of Simulator with telemetric control in a mode of step-by-step growing physical loadings at an AH is more high effective method of PR allowing authentically to stabilize a level of BP, to reduce drug therapy and to increase quality of life of the patient.

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P308-e

Physical rehabilitation in bronchial asthma

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Keywords: Bronchial asthma; Physical rehabilitation

Objectives.– Investigation of simulator training at bronchial asthma patients.

Methods.– Physical rehabilitation (PR) was carried out to 27 patients (mean age of 43 ± 5 years) with bronchial asthma (BA). In control group (16 patients with BA) PR was not carried out. PR began on 5-7 days after hospitalization